

What is claimed is:

1. A system for providing subscriber controlled data filtering in a consumption based billing cable data network, the system comprising:

a consumption based billing cable data network further comprising a subscriber cable modem, a cable modem termination system, cable network, and a consumption based billing agent;

a cable modem termination system gateway agent;

a subscriber terminal;

wherein the cable modem termination system gateway agent further comprises subscriber authorization criteria, computing means and data transfer blocking computer instructions;

wherein the data transfer blocking computer instructions cause subscriber authorized data transfers to be forwarded and cause one or more corrective measures to be applied to data transfers not subscriber authorized; and

wherein subscriber authorized data transfers are detected using one or more subscriber authorization algorithms.
2. The system of claim 1 wherein the corrective measures to be applied to data transfers not subscriber authorized are selected from the group of corrective measures consisting of discarding data transfer, logging data transfer header information, reducing subscriber consumption counts by the number of data transfers not subscriber authorized and transmitting to the subscriber notification of data transfers not subscriber authorized.
3. The system of claim 1 wherein the subscriber authorization algorithms are selected from the group of subscriber authorization algorithms consisting of stateful packet filtering, hybrid stateful packet filtering, computer virus

detection, unsolicited electronic messages detection, daily time limits detection, daily consumption limits detection, private information detection, matching keywords, excluding keywords, matching uniform resource locators, excluding uniform resource locators, matching computer applications, excluding computer applications, third party uniform resource locator matching listings, third party uniform resource locator excluding listings, category of data transfer matching, and category of data transfer excluding.

4. The system of claim 3 wherein the subscriber authorization algorithm is stateful packet filtering.
5. The system of claim 3 wherein the subscriber authorization algorithm is hybrid stateful packet filtering.
6. The system of claim 1 wherein the cable network is a hybrid fiber coaxial cable network.
7. The system of claim 1 wherein the cable modem termination system further comprises the cable modem termination system gateway agent.
8. The system of claim 1 wherein the consumption based billing agent automatically transmits an electronic message identifying current subscriber data transfer counts to subscriber upon the occurrence of a subscriber count trigger.
9. The system of claim 7 wherein the subscriber count trigger is one or more of the following events: end of billing cycle, receipt of subscriber count request message, subscriber counts exceeding subscriber selected trigger amount, subscriber counts exceeding data over cable carrier selected trigger amount.
10. A method for providing subscriber controlled data filtering in a consumption based billing cable data network, the method comprising:

associating a cable modem to an authorized subscriber;

counting data transfer between the cable modem and a cable modem termination system;

periodically billing the authorized subscriber for the amount of data transfer between the cable modem and the cable modem termination system;

storing authorized subscriber selections of data transfer authorization algorithms in a cable modem termination system gateway agent;

storing authorized subscriber selections of authorized data transfer criteria for each selected data transfer authorization algorithm in a cable modem termination system gateway agent;

receiving data packets at the cable modem termination system gateway agent;

comparing data packets to stored authorized data transfer selections;

forwarding data packets satisfying one or more authorized data transfer criteria selections; and

applying one or more corrective measures when data packets do not satisfy at least one authorized data transfer criteria selection.

11. The method of claim 10 wherein the corrective measures to be applied to data packets that do not satisfy at least one authorized data transfer criteria selection are selected from the group of corrective measures consisting of discarding data transfer, logging data transfer header information, reducing subscriber consumption counts by the number of data transfers not subscriber authorized and transmitting to the subscriber notification of data transfers not subscriber authorized.

12. The method of claim 10 wherein the data transfer authorization algorithms are selected from the group of data transfer authorization algorithms consisting of stateful packet filtering, hybrid stateful packet filtering, computer virus detection, unsolicited electronic messages detection, daily time limits detection, daily consumption limits detection, private information detection, matching keywords, excluding keywords, matching uniform resource locators, excluding uniform resource locators, matching computer applications, excluding computer applications, third party uniform resource locator matching listings, third party uniform resource locator excluding listings, category of data transfer matching, and category of data transfer excluding.
13. The method of claim 12 wherein the data transfer authorization algorithm is stateful packet filtering.
14. The method of claim 12 wherein the data transfer authorization algorithm is hybrid stateful packet filtering.
15. The method of claim 10 wherein the cable modem termination system further comprises the cable modem termination system gateway agent.
16. The method of claim 10 further comprising automatically transmitting an electronic message identifying current subscriber data transfer counts to the subscriber upon the occurrence of a subscriber count trigger.
17. The method of claim 16 wherein the subscriber count trigger is one or more of the following events: end of billing cycle, receipt of subscriber count request message, subscriber counts exceeding subscriber selected trigger amount, subscriber counts exceeding data over cable carrier selected trigger amount.